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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Toshinori HOTTA et al.

Serial No.: 10/621,977

Filed: July 17, 2003

For: STRATOSPHERIC FLYING OBJECT

Date: October 21, 2005

Group Art Unit: 3661

Examiner: Dalena TRAN

Mail Stop 16

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Attention: Refund Section - Accounting Division - Office of Finance

REQUEST FOR REFUND PURSUANT TO 37 C.F.R. § 1.26

On April 20, 2005 we filed a Response to an Office Action mailed October 20, 2004 in regard to the above-captioned application (copy attached). That Response included a Petition for Three Month Extension of Time and our check number 20316 in the amount of \$1,020.00 in payment of the extension fee.

On April 28, 2005 the Patent Office applied a charge of \$1,020.00 for a three month extension of time to our Deposit Account No. 15-0700. There is no basis for the \$1,020.00 charge. A copy of our canceled check in payment of this fee is enclosed.

Since the Extension of Time and a check in the amount of \$1,020.00 was submitted, the Patent Office is requested to refund \$1,020.00 to our Deposit Account No. 15-0700.

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Max Moskowitz

Name of applicant, assignee or
Registered Representative

Signature

October 21, 2005

Date of Signature

Respectfully submitted,

Max Moskowitz

Registration No.: 30,576

OSTROLENK, FABER, GERB & SOFFEN, LLP

1180 Avenue of the Americas

New York, New York 10036-8403

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Toshinori HOTTA	Date:	April 20, 2005
Serial No.: 10/621,977	Group Art Unit:	3661
Filed: July 17, 2003	Examiner:	Dalena TRAN
For:	STRATOSPHERIC FLYING OBJECT	

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION AND FEE FOR AUTOMATIC EXTENSION OF TIME
UNDER 37 CFR 1.17, 1.136(a) AND 35 USC 41(a)8

Sir:

Applicant(s) hereby petition(s) the Commissioner for Patents to extend the time for filing a response to the outstanding Office Action by three months. Enclosed is our check No. 20316 which includes the amount of \$1,020.00 for the petition fee in accordance with 37 CFR 1.17 computed as:

☒ Response within third month
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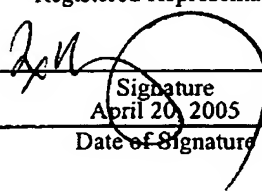
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If this petition is inadequate to avoid abandonment, the Assistant Commissioner for Patents is petitioned, under 37 C.F.R. §1.136(a), to extend the time by the number of months which will avoid abandonment under 37 C.F.R. §1.135. The fee under 37 C.F.R. § 1.17 should be charged to our Deposit Account No. 15-0700.


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MAX MOSKOWITZ

Name of applicant, assignee or
Registered Representative


Signature
April 20, 2005
Date of Signature

Respectfully submitted,


MAX MOSKOWITZ
Registration No. 30,576
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1180 Avenue of the Americas
New York, New York 10036-8403
Telephone: (212) 382-0700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Toshinori HOTTA	Date:	April 20, 2005
Serial No.: 10/621,977	Group Art Unit:	3661
Filed: July 17, 2003	Examiner:	Dalena TRAN
For: STRATOSPHERIC FLYING OBJECT		

Mail Stop Amendment
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

AMENDMENT/SUBMISSION

Sir:

This is a response to the Office Action mailed October 20, 2004 in the above-identified application. Reconsideration of the application is respectfully requested.

FEE CALCULATION

Any additional fee required has been calculated as follows:

_____ If checked, "Small Entity" status is claimed.

	NO. CLAIMS AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR		EXTRA PRESENT		RATE	ADDIT. FEE
TOTAL	14	MINUS	20	* =	0	X	(\$25 SE or \$50)	\$0
INDEP.	2	MINUS	3	** =	0	X	(\$100 SE or \$200)	\$0
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM						X	(\$180 SE or \$360)	\$0

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TOTAL \$ 0

If any additional payment is required, a check which includes the calculated fee of \$ _____
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CONTINGENT EXTENSION REQUEST

If this communication is filed after the shortened statutory time period had elapsed and no separate Petition is enclosed, the Commissioner of Patents and Trademarks is petitioned, under 37 C.F.R. § 1.136(a), to extend the time for filing a response to the outstanding Office Action by the number of months which will avoid abandonment under 37 C.F.R. § 1.135. The fee under 37 C.F.R. § 1.17 should be charged to our Deposit Account No. 15-0700.

SUMMARY OF AMENDMENTS

1. ☐ If checked, an abstract (an amended abstract) is submitted herewith.
2. ☒ If checked, amendment(s) to the drawings are submitted herewith.
3. ☒ If checked, amendment(s) to the specification are submitted herewith.
4. ☒ If checked, amendment(s) to the claims are submitted herewith.

AMENDMENT(S) TO THE SPECIFICATION

Please replace the paragraph beginning at page 7, line 7, with the following rewritten paragraph:

FIG. 2 schematically shows stratospheric platform 10 as a stratospheric flying object according to an embodiment of the present invention. As shown in FIG. 2, stratospheric platform 10 comprises flying object body 11 in the form of an airship envelope for use in the stratosphere, mount 12 suspended from a central region of flying object body 11, and despun platform unit 13 supported on mount 12. It is assumed that an axis oriented to the zenith direction through flying object body 11 staying still in the ~~air space~~ is represented as a Z-axis, an axis lying in a plane which includes the longitudinal axis of the flying object and extending perpendicular to the Z-axis is represented as an X-axis, and an axis extending perpendicularly to both the X-axis and the Z-axis is represented as a Y-axis. Despun platform unit 13 can continuously be rotated about the Z-axis and can also be changed in attitude through respective angular ranges about the X-axis and the Y-axis by an actuating mechanism (not shown in FIG. 2).

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently Amended)** A stratospheric flying object for use in a stratosphere, comprising:
a flying object body;
a platform unit mounted on said flying object body and capable of being positioned relative to the flying object; and
control means for detecting an azimuthal angle of said platform unit in a horizontal plane and actuating said platform unit to face in a constant direction at all times within said horizontal plane.
2. **(Currently Amended)** The stratospheric flying object according to claim 1, for being wherein the flying object is structured to be placed at a constant location and turned about the constant location when in operation.
3. **(Original)** The stratospheric flying object according to claim 1, further comprising a mount suspended from said flying object body, said platform unit being supported on said mount and rotatable with respect to said mount.
4. **(Original)** The stratospheric flying object according to claim 3, wherein said mount and said platform unit can be stored in said flying object body.
5. **(Original)** The stratospheric flying object according to claim 1, wherein said control means detects a tilt of said platform unit with respect to said horizontal plane and actuates said platform unit to compensate for the detected tilt.
6. **(Original)** The stratospheric flying object according to claim 5, wherein said control means comprises:

a rotational angle detector for detecting said azimuthal angle and said tilt of said platform unit;

an angular displacement calculator for calculating angular displacements of said platform unit about respective axes thereof based on a detection result by said rotational angle detector; and

an actuator for rotating said platform unit to change an attitude thereof based on the calculated angular displacements.

7. (Original) The stratospheric flying object according to claim 1, further comprising a communication device mounted on said platform unit for communications with another stratospheric flying object.

8. (Original) The stratospheric flying object according to claim 1, further comprising at least one of a first communication device mounted on said platform unit for communications with a station on the earth's surface and a second communication device mounted on said platform unit for communications with an artificial satellite.

9. (New) A stratospheric flying object for use in a stratosphere, comprising:
a flying object body;
a platform unit mounted on said flying object body; and
control means for detecting an azimuthal angle of said platform unit in a horizontal plane, detecting a tilt of said platform unit with respect to said horizontal plane, actuating said platform unit to face in a constant direction at all times within said horizontal plane and actuating said platform unit to compensate for the detected tilt,

wherein said control means comprises:

a rotational angle detector for detecting said azimuthal angle and said tilt of said platform unit;

an angular displacement calculator for calculating angular displacements of said platform unit about respective axes thereof based on a detection result by said rotational angle detector; and

an actuator for rotating said platform unit to change an attitude thereof based on the calculated angular displacements.

10. (New) The stratospheric flying object according to claim 9, for being placed at a constant location and turned about the constant location when in operation.

11. (New) The stratospheric flying object according to claim 9, further comprising a mount suspended from said flying object body, said platform unit being supported on said mount and rotatable with respect to said mount.

12. (New) The stratospheric flying object according to claim 11, wherein said mount and said platform unit can be stored in said flying object body.

13. (New) The stratospheric flying object according to claim 9, further comprising a communication device mounted on said platform unit for communications with another stratospheric flying object.

14. (New) The stratospheric flying object according to claim 9, further comprising at least one of a first communication device mounted on said platform unit for communications with a station on the earth's surface and a second communication device mounted on said platform unit for communications with an artificial satellite.

AMENDMENT TO THE DRAWING(S)

Fig. 4 has been amended. The attached sheet of formal drawing replace the original sheet including Fig 4.

REMARKS/ARGUMENTS

Applicant responds herein to the Office Action dated October 20, 2004. A Petition for Extension of Time (three months) and the fee therefor are enclosed.

Although applicant notes that claim 6 has not been rejected over prior art, that claim is a dependent claim and applicant believes that the ultimate independent claim 1 is patentable over the cited prior art.

Minor amendments in form were introduced in the specification and in the drawings, which are self-evident. The amendment to claim 2 is purely grammatical. The amendment to claim 1 merely sets forth that which is implicit therein.

According to the Office Action, 1-2, 5 and 8 are anticipated by Wang (6,567,052). Further, the Office Action states that claims 3-4 and 7 are rendered obvious by the aforementioned Wang patent, in view of Knoblach (6,628,941). Reconsideration is requested.

The invention of independent claim 1 provides a platform unit which is mounted on the flying object body and which is capable of being reoriented or positioned relative to the flying object. The objectives for and the salutary effects obtained with this construction are set forth in the introductory pages of the instant specification.

The Office Action contends that the primary Wong reference discloses such a "platform". Applicant respectfully disagrees. Although the term "platform" is commonly used in the present invention, and is also utilized in Wong, the meaning of "platform" in the context of the present invention is different from the corresponding meaning of the term in the disclosure of Wong.

The platform of Wong corresponds and refers to what is the flying object body of the present invention. In marked contrast, the "platform" of the present invention is mounted onto the flying object body and is controllable to face in a constant direction at all times within a horizontal plane.

Wong does not disclose or suggest such a control means for detecting an azimuthal angle of the platform unit in a horizontal plane and for actuating the platform unit to face in a constant direction at all times within the horizontal plane. Therefore, the present invention is clearly not anticipated by Wong and is, in fact, patentable. The remaining claims in the application are

dependent on claim 1 and impose further limitations thereon. Therefore, they are even further distanced from the prior art and are clearly patentable.

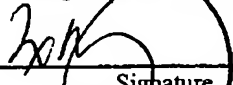
The foregoing remarks concerning claim 1 are equally applicable to independent claim 9 and its dependent claims presented herein.

Accordingly, the Examiner is respectfully requested to reconsider the application, allow the claims as amended and pass this case to issue.

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MAX MOSKOWITZ

Name of applicant, assignee or
Registered Representative



Signature
April 20, 2005

Date of Signature

Respectfully submitted,



MAX MOSKOWITZ

Registration No.: 30,576

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P/923-367

3745

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Hyung-Pyo YOON, et. al.

Date: April 21, 2005

Serial No.: 10/474,940

Group Art Unit: 3745

Filed: October 16, 2003

Examiner: Devin J. HANAN

For: ABRASION PREVENTIVE STRUCTURE OF RECIPROCATING COMPRESSOR

Mail Stop Amendment
Commissioner for Patents
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Alexandria, VA 22313-1450

PETITION AND FEE FOR AUTOMATIC EXTENSION OF TIME
UNDER 37 CFR 1.17, 1.136(a) AND 35 USC 41(a)8

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☒ Response within first month☒ not small entity (\$120) ☐ small entity (\$60)

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MAX MOSKOWITZ

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April 21, 2005

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Respectfully submitted,

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